

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|------------------|----------------------|---------------------|------------------|
| 10/658,987 | 09/09/2003 | Nathan M. Moroney | 10017909-1 | 4218 |
| 22879 7590 HEWLETT PACK. | | EXAMINER | | |
| P O BOX 272400, | 3404 E. HARMON | COUSO, YON JUNG | | |
| INTELLECTUAL PROPERTY ADMINISTRATION FORT COLLINS, CO 80527-2400 | | | ART UNIT | PAPER NUMBER |
| | | 2624 | | |
| SHORTENED STATUTORY PE | RIOD OF RESPONSE | MAIL DATE | DELIVERY MODE | |
| 3 MONTH | is | 04/05/2007 | PAPER | |

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

| | | Application No. | Applicant(s) | | |
|---|--|--|--|--------------------|--|
| | | 10/658,987 | MORONEY, NAT | MORONEY, NATHAN M. | |
| Office Action Summary | | Examiner | Art Unit | 1 | |
| | | Yon Couso | 2624 | | |
| Period fo | The MAILING DATE of this communication ap | 1 | | ddress | |
| A SH WHIC - Exte after - If NC - Failu Any | ORTENED STATUTORY PERIOD FOR REPLICATION OF THE MAILING INTERIOR OF THE MAILING OF T | DATE OF THIS COMMUI .136(a). In no event, however, may d will apply and will expire SIX (6) M te, cause the application to become | NICATION. a reply be timely filed ONTHS from the mailing date of this ABANDONED (35 U.S.C. § 133) | | |
| Status | | | • | | |
| 2a) <u></u> | Responsive to communication(s) filed on <u>09 S</u> This action is FINAL . 2b) This Since this application is in condition for allowed closed in accordance with the practice under | is action is non-final. ance except for formal m | | e merits is | |
| Dispositi | ion of Claims | | | | |
| 5) □ 6) ⋈ 7) □ 8) □ Applicati 9) □ 10) □ | Claim(s) 1-33 is/are pending in the application 4a) Of the above claim(s) is/are withdraware Claim(s) is/are allowed. Claim(s) 1-33 is/are rejected. Claim(s) is/are objected to. Claim(s) are subject to restriction and/or are subject to restriction and/or are specification is objected to by the Examination The drawing(s) filed on is/are: a) accompanies are subjected to by the Examination and applicant may not request that any objection to the Replacement drawing sheet(s) including the correct the oath or declaration is objected to by the Examination are subjected to be subjected to by the Examination are subjected to by the Examination are subjected to be subjected to by the Examination are subjected to be subjected to by the Examination are subjected to be su | er. cepted or b) objected to drawing(s) be held in abeyction is required if the drawing. | vance. See 37 CFR 1.85(a). | | |
| Priority u | ınder 35 U.S.C. § 119 | | | | |
| 12) a)[| Acknowledgment is made of a claim for foreign All b) Some * c) None of: 1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority document application from the International Bureasee the attached detailed Office action for a list | nts have been received. Its have been received in prity documents have been used in the control of the control | Application No en received in this Nationa | l Stage | |
| 2) 🔲 Notic 3) 🔯 Inforr | t(s) te of References Cited (PTO-892) te of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO/SB/08) r No(s)/Mail Date 2/23/05. | Paper N | w Summary (PTO-413) o(s)/Mail Date of Informal Patent Application | | |

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Page 2

Claims 1-33 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The claims 1-33 are directed to a method for solving a purely mathematical problem without any limitation to a practical application. See MPEP 2106.

Claims 1-33 are drawn to descriptive material NOT claimed as residing on a computer readable medium. Data structures not claimed as embodied in computer-readable media are descriptive material per se and are not statutory because they are not capable of causing functional change in the computer. See, e.g., Warmerdam, 33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a data structure per se held nonstatutory). Such claimed data structures do not define any structural and functional interrelationships between the data structure and other claimed aspects of the invention which permit the data structure's functionality to be realized.

Computer programs claimed as computer listings per se, i.e., the descriptions or expressions of the programs, are not physical "things." They are neither computer components nor statutory processes, as they are not "acts" being performed. Such claimed computer programs do not define any structural and functional interrelationships between the computer program and other claimed elements of a computer which permit the computer program's functionality to be realized. In contrast, a claimed computer-readable medium encoded with a computer program is a computer element which defines structural and functional interrelationships between the computer

Application/Control Number: 10/658,987

Art Unit: 2624

program and the rest of the computer which permit the computer program's functionality to be realized, and is thus statutory. Accordingly, it is important to distinguish claims that define descriptive material per se from claims that define statutory inventions.

Since a computer program is merely a set of instructions capable of being executed by a computer, the computer program itself is not a process and Office personnel should treat a claim for a computer program, without the computer-readable medium needed to realize the computer program's functionality, as nonstatutory functional descriptive material.

When a computer program is claimed in a process where the computer is executing the computer program's instructions, Office personnel should treat the claim as a process claim. See paragraph IV.B.2(b). When a computer program is recited in conjunction with a physical structure, such as a computer memory, Office personnel should treat the claim as a product claim. See paragraph IV.B.2(a).

In contrast, a claimed computer-readable medium encoded with data structure defines structural interrelationships between the data structure and the computer software and hardware components which permits the data structure 's functionality to be realized, and is thus statutory (MPEP 2106.IV.B.1(a)).

Claims 18-26 are directed to a single means claims which are rejected under 35 USC 112, first paragraph as being of undue breath (see MPEP 2164.08), <u>In re Hyatt,</u> 708 F.2d 712, 218 USPQ 195 (Fed. Cir. 1983).

Art Unit: 2624

3. Claims 1, 4-18, 21-27, 32 and 34 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 reads "A method of processing an image, the method comprising estimating a parameter for local color correction, the parameter estimation including computing a cumulative histogram path length of the image." It is not clear what cumulative histogram path length of the image is and how the cumulative histogram path is obtained.

Claims 4, 15, 18, 27 include the same problem.

Claims 5-14, 16, 17, 21-26 depend from an indefinite antecedent claim.

Claim 32 depends from claim 32. Please correct the dependency of the claim.

Claim 34 depends from claim 24. However, claim 24 is not an article claim.

Please correct the dependency of the claim.

- 4. The disclosure is objected to because of the following informalities: The spacing between the letter is inconsistent throughout the specification, e.g. paragraph 1, "n onlinear", "R etinex", "i ts"; paragraph 2 "c ases"; paragraph 12 "b e", "b y", "b in". Please find all affected words from the entire specification and correct appropriately.
- 5. The IDs filed 2/23/2005 has been considered. However, US Publication No. 2002/171663 has been crossed out because of an error in citing the reference. The correct number is 2002/0171663. The examiner has included this reference in the form PTO-892.

Art Unit: 2624

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yon Couso whose telephone number is (571) 272-7448. The examiner can normally be reached on Monday through Friday from 8:30 to 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eileen Lillis, can be reached on (571) 272-6928. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

YJC

March 30, 2007

YON J. COUSO PRIMARY EXAMINER